ARIZONA JUDICIAL BRANCH



INFORMATION TECHNOLOGY STRATEGIC INITIATIVES

FOR FISCAL YEARS 2012-2014

VIII. INFORMATION TECHNOLOGY STRATEGIC INITIATIVES

ALIGNMENT

The Information Technology Strategic Initiatives are aligned with initiatives in *Justice* 20/20: A Vision for the Future of the Arizona Judicial Branch 2010-2015. This section provides information on each Information Technology Strategic Initiative and its alignment with business needs of the Judiciary.

The current IT strategic initiatives are:

- 1. Promote a Systemic Thinking Approach to Problem Solving with Technology
- 2. Provide Infrastructure Processes, and Procedures to Support Statewide Court Communication, Automation, and Integration
- Enhance Information Security and Disaster Recovery Policies, Procedures, and Technology to Protect Statewide Court Technology-Related Assets
- Standardize Processes and Solutions to Improve Efficiency and Effectiveness of Court Operations
- 5. Complete and Enhance Second-Generation Statewide Automation Projects
- **6.** Improve Data Exchange and Communications with the Public, Other Criminal Justice Functions, and Outside Agencies
- **7.** Digitize the Court Environment
- **8.** Provide Divisions of the Administrative Office of the Courts with Automated Solutions to Meet Internal Goals and Objectives

Through first-generation automation efforts, the Arizona Judicial Branch has become dependent upon technology to facilitate its record keeping and communications activities. Information technology initiatives enable the Judiciary to better use dependable technologies and related processes to enhance and support their business needs.

An initiative to "Promote a Systemic Thinking Approach to Technological Solutions" was first introduced in the FY 2002-2004 plan. With the introduction of *Good to Great: A Strategic Agenda for Arizona's Courts 2005-2010*, this approach became even more important. Many initiatives continue to focus on long-term changes of business practices to improve public safety and service. The approach has always been supported, but as more and more interdependent projects are undertaken, it seems prudent to highlight this very important perspective. Its intent is to encourage both the business leaders and technologists to more thoroughly examine the impacts of their automation undertakings and to consider business process reengineering a key element in the process. When undertaking a project, technologists and their business leaders

need to balance the immediate need with the long-term impacts, recognizing the increasing interconnectedness of courts and justice partners.

The Judiciary depends on electronic communications via email, the Internet, and the Intranet (which resides on the Arizona Judicial Information Network) to communicate with each other, the public, and with other justice agencies. Therefore, enhancing and securing the infrastructure is critical to implementation of judicial strategic business projects. Information technology strategic goals encompass an approach; building a foundation through infrastructure, security, and statewide applications; integrating with justice partners, and constructing an information supply chain that ends with appropriate public access.

Establishing basic case and cash management systems, having common data definitions, standard codes, and consistent data recording practices in courts across the state supports the need of the Judiciary to gather, track, and analyze information. The information technology project to create a central data repository to provide for data analysis, for instance, is predicated on all courts' case and cash management data being in electronic form.

A more accessible court system is a focus of the Judiciary's strategic initiatives. Technology initiatives and their related projects support that with the introduction of electronic filing and electronic forms via the Internet. A focus on security, business continuity, and disaster recovery necessarily accompanies the courts' transition to an erecords environment as well. Construction is underway on central repositories to store copies of court documents geographically distant from the courts themselves.

An integrated justice system is also a priority. Given that there is a single court organization in the state versus multiple other agencies involved in law enforcement, the Branch is in a unique position to bring together the other functions to improve the manner in which justice is administered in the State of Arizona. Technology projects to participate in data exchanges and sharing of information with local and state agencies support this. And, of course, having a reliable and secure network is critical to such electronic sharing.

For ease of reference, the IT strategic initiatives aligned to meet the Judiciary's business needs have been numbered as follows:

- 1 systemic thinking/approach
- 2 provide a robust infrastructure
- 3 enhance security and disaster recovery
- 4 standardize processes and solutions
- 5 complete 2nd generation automation
- 6 improve data exchange and communications
- 7 digitize the court environment
- 8 provide administrative support

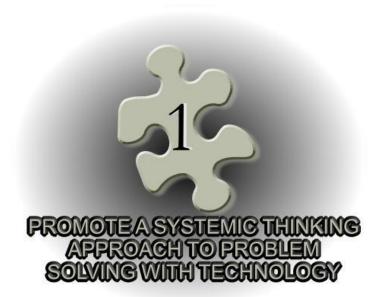
Information Technology Strategic Initiatives Summary

The following sections detail each of the eight information technology strategic initiatives. The *Background* section includes a description of the initiative, its background, and the elements of the technology environment included in the initiative. The Strategic Alignment section aligns the initiatives with the Commission on Technology's strategic automation goals.

In the *Business Value* section, the benefits that will accrue to the Judiciary and to the general public are identified. They include such things as improved quality of case and cash management, enhancing access to the courts, and reducing or avoiding costs.

In the **Dependencies** section, other activities, projects and groups upon which achieving this initiative depend are listed. This section will highlight the relationship of the strategic projects to one another.

Finally, in the *Impacts* section, each strategic project associated with the initiative is identified.



BACKGROUND

The Judicial Branch is directing its efforts to "front-office" solutions, offering improved public access, internal and external integration, and better customer service. As we address such systems as jury, online courtrooms, e-filing, and justice integration, we must take a systemic approach. We are in danger of either not meeting the demand or building unique solutions for every problem or commitment, increasing both cost and complexity. We can respond with a piecemeal, reactive approach or we can:

- Understand and Automate the Supply Chain
- Understand and Automate Judicial Business Process

The supply chain is made up of all our business partners, including law enforcement and prosecuting attorneys. If the judiciary doesn't respond in an organized fashion, it could use ineffective or incompatible tools and approaches to address interdependence, integration and other process challenges. For instance, supporting multiple processes, protocols, and systems in our integration with other agencies, especially criminal justice agencies, will increase both complexity and cost.

The solution is to:

- Acknowledge process interdependence as the guiding principle for judicial planning.
- Study, document, and then automate the judicial system supply chain in a uniform manner.
- Build an infrastructure for integration of information among courts and between courts and other agencies.
- Identify a "best practices" approach to judicial business processes, then document and automate them.

STRATEGIC ALIGNMENT

STRATEGIC INITIATIVE 1: SYSTEMIC THINKING/APPROACH ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS Provide a stable, reliable, functionally rich, extensible, interoperable base of business automation and infrastructure. Improve information access and communication from and to the judicial functions. Investigate and invest in technology solutions that improve judicial efficiency and effectiveness in handling growing caseloads.

BUSINESS VALUE

- Improved responsiveness and productivity of court staff.
- Reduced risks in and complexity of systems development by reducing the number of process, systems, and protocols/standards requiring support.
- Improved overall quality of processes by using a "best practices" approach.
- Improved rural court productivity by providing them with the same level of processes supported by technology afforded to large, metropolitan courts.
- Reduced costs of resources by centralizing and eliminating, where feasible, duplicate procedures, forms, processes, and structures.
- Reduced training and support resources by standardizing the processes and procedures as well as the applications software, systems software, and hardware deployed to support them.

DEPENDENCIES

All strategic projects are dependent on this initiative. The systemic thinking approach should and will be applied to projects. An analysis and documentation of the supply chain, as well as the underlying business process, will assure that a technology implementation is supporting a "best practices" solution.

IMPACTS

The impact is widespread. Each IT project should implement a solution that is not just "paving a cow path." As interdependency increases, projects must also consider impacts on other systems and on business processes. This includes secondary impacts outside the immediate sphere of the project, potentially including other agencies. The judiciary must now examine the entire context, since technology has changed the environment. Solutions must be designed with the understanding that there may be new and better ways of doing business using the new tools.

This initiative has an impact on all IT projects.



BACKGROUND

The Judiciary has been deploying and supporting automation statewide since 1990. A sophisticated and extensive infrastructure is required to support this effort. Most important to communication and coordination is a network connecting courts to one another and to the Supreme Court. There are two divisions of the Court of Appeals, 15 Superior Court locations, 78 Justice of the Peace Courts, and 83 Municipal Courts. There are over 384 judges and more than 9,600 employees of the Judiciary statewide.

The Arizona Judicial Information Network (AJIN) is a dedicated DS-1 MPLS and Ethernet network extending to all courts as well as standalone probation and detention sites statewide. A few courts reach the AOC using virtual private network (VPN) connections through the Internet. As the demand increases for functionality such as electronic document management systems, interactive Web-based training, videoconferencing, disaster recovery hot sites, and information sharing among courts and agencies, the network must correspondingly increase throughput and flexibility. The Judiciary has responsibility for the expansion, enhancement, and maintenance of the network to meet bandwidth requirements, and for working with communications providers to assure uninterrupted system availability.

Created during Fiscal Year 1998, a centralized customer service center staffed by specialists in desktop software, court applications software, and desktop hardware fields all help calls from sites. It uses problem and change tracking software as well as call tracking software. The scope of operations has been expanded from support of the AZTEC application only to include all automation statewide. This effort is critical to maintaining on-going operations in each Arizona court and probation department site.

First-level support assists court personnel statewide in resolving problems. Second-level technical support personnel install and upgrade systems and respond to critical systems problems. They also proactively maintain equipment for over 1500 users statewide. While it is most desirable to have onsite or regional technical personnel to provide the most immediate and timely support, deployment of dedicated AOC field support personnel remains cost prohibitive. Deployment of a distributed systems management system was undertaken in FY 2004 to reduce field support travel requirements. The Altiris software enables a technician located in Phoenix to remotely manage court PCs throughout the state.

In FY 2001, the centralized support center and second-level support functions were combined to form ITD Central Support Services. Second-level support personnel were cross-trained in the statewide applications in order to address more than one application during a site visit. This move was intended to improve assistance response time, reduce field support costs, and bring about a more systemic perspective among support personnel.

To support training needs statewide, a local automation trainer/business analyst continues to be funded. State funding matches local contributions to create this position, which provides centralized training on automation systems and "best practice" court processes. The position addresses training of new employees, introduction of new processes, new court software release training support, and generally works with centralized state trainers to support uniformity and quality in court processing statewide. This program has been very successful in past years and will receive continued funding through Fiscal Year 2012 as the new general jurisdiction case management system continues widespread use. The position will also be key to rolling out the limited jurisdiction case management system in a timely fashion.

Historically, not all rural counties have been able to take advantage of the trainer positions, due to local funding constraints. AOC Court Services Division obtained permission from COT to reallocate some funding to address the needs of counties that have never been able to afford the field trainer for which state-matching funds had been reserved. This resulted in increased coverage by field trainers to underserved counties.

STRATEGIC ALIGNMENT

STRATEGIC INITIATIVE 2: INFRASTRUCTURE ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS Provide a stable, reliable, functionally rich, extensible, interoperable base of business automation and infrastructure. Improve information access and communication from and to the judicial functions. Investigate and invest in technology solutions that improve judicial efficiency and effectiveness in handling growing caseloads.

BUSINESS VALUE

This strategic initiative will create, extend, and support an infrastructure that provides business value to statewide activities, involving the network, centralized help desk support, field support, equipment, and distributed system management. The benefits or business values for each area will allow:

NETWORK

- Improved rural court productivity by providing the same level of technology afforded the large metropolitan courts. Improved customer service by providing higher quality of data and case management and greater public access to information.
- Improved, more secure access to the Internet for rural courts with improved throughput.
- Improved centralized access to information, such as criminal history, orders of protection, domestic violence, etc., for law enforcement.
- Improved electronic integration with the legal community and other justice-related departments and agencies.
- Improved responsiveness and productivity of court staff.
- Reduced risks in and complexity of systems development by reducing the number of systems and protocols/standards needing support.
- Reduced reliance on local vendors.
- Improved openness and interoperability of judicial systems with outside agencies.

CENTRALIZED HELP DESK

- Improved overall quality of systems by devoting limited resources to fewer of them.
- Improved rural court productivity by providing them with the same level of technology afforded the large metropolitan courts.
- Reduced costs of resources by centralizing and eliminating, where feasible, duplicate support structures.
- Reduced training and support resources required by standardizing the applications software, systems software, and hardware deployed.

FIELD SUPPORT

- Improved responsiveness and productivity of court staff.
- Improved rural court productivity by providing the same level of technology as in the large metropolitan courts.
- Reduced training and support resources required by standardizing the applications software, systems software, and hardware deployed.
- Increased efficiency, accuracy, and effectiveness of support by developing and documenting processes and procedures.
- Reduced costs of resources by centralizing and eliminating duplicate support structures.
- Improved breadth of knowledge and quality of support staff.

IT EQUIPMENT UPGRADES

- Improved rural court productivity by providing the same level of technology afforded to large metropolitan courts.
- Reduced risks in and complexity of systems development by reducing the number of systems and protocols/standards requiring support.
- Reduced cost of maintenance by routine enhancements, upgrades, and replacements as well as preventative maintenance.
- Improved power consumption/energy efficiency and reduced carbon footprint.

DISTRIBUTED SYSTEM MANAGEMENT

- Increased effectiveness of support by automating tracking, distribution, and other routine tasks.
- Increased system availability.
- Improved responsiveness and quality of support staff customer service.
- Reduced travel-related costs for support.

DEPENDENCIES

- Continued availability and enhancement of high-speed communications statewide (as courts continue to consume more bandwidth).
- Continued funding availability for field training positions.
- Effective use of remote PC management software in the Windows Vista environment and new applications.
- Continued refresh of PC hardware, operating systems, and software in the field on a regular cycle.

IMPACTS

The infrastructure, along with the applications deployed on state-supported hardware and software throughout Arizona, provides the processing and communications foundation on which the remaining initiatives are built. Such initiatives and projects as justice agency integration, public access, electronic filing, and improved statistical reporting for accountability rely on a robust and well-supported infrastructure.

Nearly all the IT projects are impacted by and aligned with this initiative.



BACKGROUND

The digital world is becoming ever more perilous as computer systems become increasingly interconnected. With the creation of AJIN, the deployment of the centralized JOLTS juvenile tracking system, and the development of the AZTEC case management system using client server architecture, the Judicial Branch accepted the major responsibility of safeguarding the data and infrastructure on which courts statewide rely. An information security specialist developed the specific strategies, standards, and policies to achieve this goal.

Taking a purely central approach to addressing data security has become insufficient over time as an increasingly decentralized environment is constructed. For example, Electronic Document Management and Criminal Justice Data Integration projects present increased requirements for data security at the local level as statewide processes grow dependent on feeds from courts. Unfortunately, local courts typically have neither the money nor the equipment to ensure continuation of their business in a disaster. What used to be their isolated risk has graduated to a system-wide risk, as courts become increasingly process dependent on electronic documents and more data gets captured at the source. The Administrative Office of the Courts is working with the Department of Public Safety to address data security issues related to criminal justice data. Several committees, most notably the Court's Keeping the Record Committee, have been addressing a variety of electronic recordkeeping issues. The Clerks of Court, as the constitutionally designated keepers of the record, are also involved in various workgroups to develop appropriate standards and processes to provide for secure and reliable electronic data and documents.

COT continues to recognize an increasingly long list of vulnerabilities for courts. Two standing subcommittees of the Commission, CACC and TAC, have been charged with crafting best practices, related procedures, and training sessions to improve the survivability of data at the local courthouse. A business continuity matrix was approved for distribution with the FY08 IT planning materials and subsequently became the tool

for recording efforts by the general jurisdiction case management system team to quantify local risks and dependencies on statewide systems as part of their pre-implementation efforts. Results of the data gathering effort represented by the matrix are quantifying the business risks courts face and providing perspective on the costs to address those risks. An assessment and planning guide of some sort is also envisioned. In addition, CACC and TAC were directed to examine a variety of options and related costs for protecting data in a distributed environment, and then return to COT with their joint recommendations for financially feasible solutions.

Malicious Web content, viruses, and phishing have given way to much more sophisticated attacks that bypass traditional perimeter defenses. Botnet thievery of credentials, SQL injection attacks, and cross-site scripting are only a few of the new threats. Various high priority projects and tasks must be accomplished over the coming years to assure the courts' network and assets remain protected.

Section K of A.R.S. § 44-7501, "Notification of Breach of Security System," mandates that courts create and maintain an information security policy that includes notification procedures for a breach of the security system of the court. "Breach" means an unauthorized acquisition of and access to unencrypted or unredacted computerized data that materially compromises the security or confidentiality of personal information likely to cause substantial economic loss to an individual. The scope of personal identification covers two main areas:

- 1. An individual's first name or first initial and last name in combination with a
 - social security number,
 - driver license number, or
 - non-operating identification license number.
- 2. An individual's financial account number, credit card number, or debit card number in combination with any required security code, access code or password that would permit access to the individual's financial account.

The chief justice has issued an administrative order (AO 2008-68) to instruct courts on the minimum content of a local policy that complies with the legislation.

STRATEGIC ALIGNMENT

STRATEGIC INITIATIVE 3: ENHANCE SECURITY AND DISASTER RECOVERY ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS Provide a stable, reliable, functionally rich, extensible, interoperable base of business automation and infrastructure. Improve information access and communication from and to the judicial functions. Investigate and invest in technology solutions that improve judicial efficiency and effectiveness in handling growing caseloads.

BUSINESS VALUE

Better protect courts' technology-related assets to reduce the risk of losing court assets or breaching data privacy requirements. Minimize disruption of business or loss of electronic records in the event of a local court disaster.

DEPENDENCIES

SECURITY

- Continued security/disaster recovery of centralized systems and data.
- Cooperative solutions with local governments when developing standards for local data and business continuity actions.
- Layers of security on image and e-record management systems to appropriately protect information and the court record.

PRIVACY

- Rule 123 and legislation-compliant solutions for use with EDMS, CMS, and public access projects.
- Trustworthy redaction techniques for electronic information.

IMPACTS

If not successful, disruption of court business operations will occur, as well as loss of valuable court data and documents. Personal and confidential data, protected by Rule 123, might be available for public view as a result of missing or insufficient controls.

A data breach would prompt initiation of a costly investigation and trust-eroding public notification process.

Projects affected include:

- Business Continuity
- AJACS (LJ CMS) Development/Rollout
- LJ Electronic Document Management
- Electronic Filing Central Repositories



BACKGROUND

As courts enter the realm of e-government and e-records, the importance of having enterprise architecture (EA) and related technology standards cannot be emphasized enough. Around 80 percent of new technology companies go out of business within 5 years of their formation. IT trade publications continue to hype expensive new approaches to age-old business problems every day. The pace of change increases at an exponential rate. New technologies are always accompanied by risks. Courts that make the wrong decisions about technology often find themselves relying on unsupported applications for their day-to-day work, sometimes for many years, an uncomfortable and expensive place to be.

A need exists for a set of cohesive standards to build to that promotes both reuse and sharing of automation systems across many jurisdictions. EA functions as a type of building code across the entire organization, describing a direction for current and future technology activities, supported by underlying product and integration standards that mitigate risk for courts. It acknowledges the interdependence of courts within the supply chain of data as well as the distributed nature of the court system and helps them maximize local investments by selecting products that interoperate, promoting data sharing and citizen access through e-government. EA focuses on the holistic impact to the organization.

EA effectively supports and enhances the business of government and improves the ability to deliver responsive, cost-effective government functions and services. Effective utilization of technology to achieve business functions and services, increasing citizen access to those services, sharing information and resources at all levels of government, and maximizing investment in IT resources are major motivating factors for the development and implementation of EA. Using technologies and products adhering to the "building code" enhances government services as a whole, promotes e-government solutions, improves productivity and performance, and optimizes economies of scale through interoperability, portability, scalability, and the sharing of resources. Standard

solutions also eliminate the need to make redundant contracts and purchases. They reduce implementation and support costs by limiting the range of solutions to a manageable few.

All technologies traverse a practical and functional life cycle from emerging to mainstream then, over time, to unsupported and eventually to obsolete. To provide direction regarding the life cycle categories for common court technologies, the Technical Advisory Council maintains a detailed table of EA standards for the branch. The Judicial Project Investment Justification (JPIJ) requires an explanation of the adherence of any new project to the standards. The annual IT plan project detail input sheet requires the same. The table was enhanced in late FY 2006 to include a designation of the lifecycle category associated with listed products and technologies: Watchlist, Mainstream, Containment, or Retirement.

COT has designated that all items labeled "retirement" have a replacement strategy identified in the annual IT plan for the courts where they are installed. WordPerfect is an example. For reference, the approved table resides at http://www.azcourts.gov/cot/EnterpriseArchitectureStandards.aspx. Any court can request that TAC consider a new standard for addition to the table at any time. There is also an exception process a court may use to request a business-related, one-time waiver to a particular standard.

In addition to general standards contained in the EA standards table, like GJXDM, more specific, pragmatic direction is needed in relation to various projects. A subset of a standard is sometimes necessary to provide direction to court developers. An example is specific XML tags used to communicate specific types of information or transactions. In those instances, COT has directed TAC to establish and maintain detailed specifications for various functions or levels of court within the framework of the approved standards. Issues related to specifications may be brought to COT for resolution, if necessary.

Specifications developed so far relate to e-filing civil cases and court-to-court record on appeal. Originally based on the Maricopa multi-vendor model, the civil case e-filing specification defines a common tagging scheme that complies with ECF 4.0, an industry standard for e-filing. The record on appeal specification defines tags necessary to electronically transfer a record on appeal, including the index of record, from a trial court to an appellate court, and from one appellate court to the next appellate court. Criminal standards are also being set in conjunction with ACJC and criminal justice partners. A specification for reporting defensive driving school registrations and completions has also been ratified in support of the recent central clearinghouse project.

STRATEGIC ALIGNMENT

STRATEGIC INITIATIVE 4: STANDARDIZE PROCESS AND SOLUTIONS ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS

- Provide a stable, reliable, functionally rich, extensible, interoperable base of business automation and infrastructure.
- Improve information access and communication from and to the judicial functions.
- Investigate and invest in technology solutions that improve judicial efficiency and effectiveness in handling growing caseloads.

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BUSINESS VALUE

ENTERPRISE ARCHITECTURE

- Reduced risks in and complexity of systems development by reducing the number of systems and protocols/standards requiring support.
- Reduced training and support resources required by standardizing the applications software, systems software, and hardware deployed.
- Improved rural court productivity by providing them with the same level of technology afforded the large metropolitan courts.
- Improved responsiveness and productivity of court staff.

STANDARDS

- Mitigated project risks, increased project success, and increased interoperability and sharing of information and resources.
- Improved responsiveness and productivity of court staff.
- Improved rural court productivity by providing them with the same level of technology afforded the large metropolitan courts.
- Improved quality of support staff customer service.

DETAILED SPECIFICATIONS

- Improved specific direction on application of standards to developers.
- Enablement of interoperability of component-based systems whether developed in courts or by vendors.

DEPENDENCIES

- Continued definition, maintenance, and communication of EA Standards.
- Most priority projects are either dependent upon or will significantly benefit from the application of standards and related, detailed specifications.
- Every exception approved puts a chink in the armor of a cohesive, statewide, integrated system.

IMPACTS

Every project needs to be closely aligned to this strategic initiative. Courts having items listed in the "Retirement" column of the EA Standards Table must identify a replacement strategy in their next IT plan submittal.



BACKGROUND

The courts embarked on the first wave of statewide automation around 1990 with a goal of implementing a standard case and financial management system to replace manual processes. A juvenile probation system was expanded from Maricopa County to statewide use by the mid-1990s. The AZTEC case management system was deployed to 147 courts by the end of the decade. The hallmark of first-wave automation systems was their standalone approach, targeting specific high volume areas and incidentally replicating functions of other automation products, e.g., JOLTS and AZTEC both did calendaring, case management, and financials, only for two different populations. They were constructed for a specific level of court absent any overarching direction from branch technology or integration standards and so took on a closed, proprietary flavor, necessitating a back-end data warehouse to accomplish any integration. Sadly, these systems typically only increased the workload of the court, in the end, as personnel entered data into multiple systems in addition to wielding the paper. The systems did not align well with court business practices, being encyclopedic rather than workflow process based.

The second wave of automation is component based and focused on re-use of building blocks that can be modified and flexed across various systems. Doing so requires clear standards in both technology and business processes. The systems are designed from the standpoint of innovation more than generation; most data courts work with comes from somewhere else. The court acts as a hub of information more than an originator. Second-generation systems pick up information from law enforcement and attorneys' systems, reducing workload by moving the responsibility for input to the source to get the clerk out of the data entry business. New systems contain workflow right out of the box, providing an inherent standard business process, removing the need for understanding the entire process before being able to perform any part of it. They also are exception based, triggering alerts whenever items fall outside specified parameters. The Judiciary has several second-generation statewide automation projects underway and completing them remains a top priority. They provide for probation, case, and cash

management for the various levels and/or departments within the Judiciary, using shared core services that leverage development efforts following standards.

Meanwhile, support and enhancement of existing statewide applications remain a priority, though balanced against the remaining life of the application being enhanced. The Arizona Court Automation Project (ACAP) continues to provide automation to Justice and Municipal courts. During FY 2000, the Windows version of the AZTEC case management software was implemented in most rural and suburban courts. During FY 2002, a rollout replacement of equipment and a software upgrade was begun for systems deployed in 2000. The next phase significantly enhanced the application in the financial arena and enabled its use in the large metropolitan courts by increasing its case processing capacity. In FY 2006, AZTEC began to be opened to allow e-citation and red light case initiation using an XML data stream, paving the way for electronic case filing while awaiting implementation of a next-generation case management system. Late in FY 2007, COT decided, and AJC concurred, to pursue implementation of a vendor CMS for general jurisdiction courts. Following successful implementation of that CMS in 13 superior courts, development work is presently underway on enhancements for limited jurisdiction courts around the state currently using AZTEC. Further development is being undertaken for the largest non-AZTEC courts based on requirements detailed by Mesa Municipal Court. Implementation of the finished system will standardize and significantly improve the efficiency of all limited jurisdiction courts in the state.

The Criminal Justice Data Integration Project will also significantly reduce levels of court effort by eventually eliminating the redundant data entry now being performed. By 2004, the Judiciary had 64 Arizona general and limited jurisdiction courts operating on the ACAP software solution to pass criminal history data to DPS. Data integration will be further strengthened with the rollout of new limited and general case management system statewide as well as the construction of the Arizona Disposition Reporting System in conjunction with ACJC and DPS. This project proves the concept of using an enterprise service bus approach for statewide integration by connecting disparate information systems among justice partners.

Appellamation is an appellate court case management system developed for the Supreme Court and both divisions of the Court of Appeals. This system, which uses unique appellate information architecture dissimilar to the AZTEC database, is being integrated with both AZTEC and the AJACS CMS to accept transfers of case information on appeal using the e-ROA program. The Supreme Court and the Court of Appeals, Division 1, have implemented Appellamation.

The Juvenile Online Tracking System (JOLTS) provides for the automation needs of the juvenile justice community. The first statewide system implemented, the JOLTS statewide juvenile probation caseload management system developed in Maricopa County Superior Court in 1979 is being replaced by a second-generation system in both Maricopa and the other counties. In May 2004, the Administrative Office of the Courts received permission from the Information Technology Authorization Committee (ITAC)

to proceed with development using the new statewide judicial architecture. JOLTS users number approximately 2,600 statewide and include the following agencies: Juvenile Court Centers, Victim Rights Advocates, County Attorneys, Court Appointed Special Advocates (CASA), Public Defenders, Foster Care Review Board (FCRB), Attorney General's Office, Department of Economic Security, and Clerk of the Court, ComCare, Court Administration, Department of Juvenile Corrections and Adult Probation Departments.

The effort to automate and enhance adult probation tracking functions statewide passed a key milestone in 2006, with implementation of the Adult Probation Enterprise Tracking System (APETS) in the final four counties. All data statewide now resides on a single database – over 328,000 client records and 15.55 million contact records. Periodic enhancements to the software, support, and user training continue, including fundamental programming changes to support a business process change to evidence-based practices (EBP) within the plan period.

Fourteen of the fifteen superior courts use a common jury processing software package. Maricopa Superior Court, formerly operating on an internally developed system, migrated to an off-the-shelf system several years ago, based on their large volume needs as well as extended functionality requirements (like Web and IVR interfaces for the public). The judiciary undertook a study to determine the direction for jury processing software and functionality. That work group reviewed the migration path of the existing software in fourteen courts and determined to remain with that software rather than convert to the package selected by Maricopa. Recent upgrades to that system have enabled a more responsive and interactive interface to the public for jury processing via the Internet as directed by the Commission on Technology.

Related centralized data repositories, processing and/or standards for secondgeneration systems include electronic document management systems, electronic filing, collections, legal research/legal portal, data sharing and integration processing, selfservice center court forms, authentication and security, and global directories. The COT's ad hoc committee on Centralized Processing reviewed these issues during FY 2003 and provided recommended criteria to electing the degree and type of centralization for many common court automation functions.

STRATEGIC ALIGNMENT

STRATEGIC INITIATIVE 5: SECOND-GENERATION STATEWIDE AUTOMATION ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS Provide a stable, reliable, functionally rich, extensible, interoperable base of business automation and infrastructure. Improve information access and communication from and to the judicial functions.

BUSINESS VALUE

caseloads.

- Improved effectiveness of the Criminal Justice System through the electronic exchange of court data and documents and the provision of decision-making information to criminal justice administrators.
- Improved rural court productivity by providing the same level of technology afforded the large metropolitan courts.
- Improved consistency in record keeping and case management practices statewide.
- Improved customer service by providing higher quality of data and case management and greater public access to information.
- Improved responsiveness and productivity of court staff.
- Increased productivity of court and support staffs.
- Reduced development costs by reducing the number of systems implemented and supported statewide.
- Reduced maintenance and enhancement costs by reducing the number of systems implemented and supported statewide.
- Reduced cost impact of legislative and judicial administrative changes to processes and procedures requiring changes to application software.
- Reduced training and support resources required by standardizing the applications software, systems software, and hardware deployed.
- Reduced cost of maintenance by routine enhancements, upgrades, and replacements as well as preventative maintenance.

DEPENDENCIES

- The maintenance and continued upgrading of the computing and communications infrastructure.
- Sufficient resources to complete current development and implementation efforts for limited jurisdiction courts while functionality of the general jurisdiction system is extended and enhanced.
- AOC/vendor modifications to provide a limited jurisdiction statewide system that shares the codeset of the general jurisdiction system.
- Staff resources to perform statewide system development and implementations while still providing legacy support for case and probation management systems statewide.
- The establishment of a cross-branch policy and governance structure for the development of the Criminal Justice Data Integration Project.
- Sufficient resources to create and support new central repositories of electronic documents in support of statewide electronic case filing.

IMPACTS

With several statewide systems all being replaced at nearly the same time, the financial impact is unprecedented. The problem has now been compounded over several years as the planned funding for the initiatives got interrupted by multiple reallocations of JCEF (a state-level automation funding source) by the legislature. There is no longer any certainty that sufficient funds will exist to complete the statewide implementations of these vital, second-generation systems.

Court business processes will be affected by the workflow and document processing capabilities built into the new systems, resulting in much greater efficiencies in data entry and reporting. Integration points built into new automation systems will accept digital input from other systems and electronic filings, thereby precluding clerks from having to re-enter data from other sources.

Projects include:

- New Limited Jurisdiction Case Management System Development, Pilot, and Rollout
- JOLTSaz Pilot and Statewide Rollout
- Electronic Case Filing
- Central Repositories for Electronic Documents



BACKGROUND

The Judiciary provides electronic access to court information via the Internet and uses messaging middleware in order to serve the public better, contribute to the improved effectiveness of the criminal justice system, and make courts more accessible. Information includes general information, case information, and court calendars. Additionally, we continue to foster development of electronic data interchanges between criminal justice agencies and work toward electronic filing for both the legal community and self-represented litigants.

During Fiscal Year 2002, the Judiciary launched its Public Access Case Look-Up Web site. Using the service, the public can access case information with a 24-hour currency by case number or party name. This offering was an immediate and enormous success; in only the first five months of operation (February through June 2002), the site had over 12 million queries. Last year, it had over 52 million queries by over 4 million visitors.

The Judicial Branch recognizes and supports the need for improved operational effectiveness of the criminal justice system as a whole. Each criminal justice function must improve not only within itself but also in concert with the other criminal justice agencies. Given that a single court organization exists in the state versus multiple other agencies involved in law enforcement, the Branch is in a unique position to bring together the other functions to improve the manner in which justice is administered in the State of Arizona. The courts, being central to the system, are eager to collaborate in the statewide effort that began in Coconino County in Fiscal Year 2000 to automate the exchange of data used by more than one criminal justice agency. The original project linking the AZTEC CMS application for the Superior Court in Coconino County and the Coconino County Attorney Case Management System continues to be expanded. Having created the Integration System Model, which was made available to the remaining Arizona counties, AZTEC's ability to collect integration-related data has

been expanded to accept an XML data stream. Integration functions using XML interfaces will also be performed "out of the box" by the new, second-generation CMSs.

A recent project provided law enforcement and the public with access to a repository of domestic violence information. That information is currently being standardized nationwide as part of Project Passport, headed by the National Center for State Courts (NCSC), allowing protective orders to travel from state to state with easy recognition for law enforcement. More general availability will be subject to the policies contained in the updated Rule 123 that responds to privacy concerns expressed by victims groups.

Another data sharing project is electronic disposition reporting. This project provides for electronically sending criminal case dispositions to the Department of Public Safety via a messaging system. In pilot during Fiscal Year 2002, the system development was completed in 2003. Since 2004, 67 courts have been able to electronically report dispositions to the state's criminal history repository. In concert with ACJC and DPS, AOC is taking the next incremental step in creating an electronic workflow among justice partners using enterprise service bus (ESB) architecture for exchanging criminal information prior to its inclusion in the DPS criminal data repository. The enterprise service bus acts as a clearinghouse for information independent from the systems that provide or consume its data. This approach will increase the ultimate acceptance rate for data at DPS to above 90 percent and ensure that justice partners are processing the right charges for the right suspect. DPS is presently re-writing the application to port it to their standard software environment while AOC continues to construct the AJACS case management system interface.

The disposition-reporting project has proven the enterprise service bus concept, defined as the transaction services layer of the courts' enterprise-wide technical architecture. Other integration projects will ultimately make use of the same ESB architecture, since it precludes creation of a single, all-encompassing automation system (and the associated massive price tag) or the coordination of myriad reprogramming projects to align legacy systems' processing. The ESB focuses only on the output and input rather than the inner workings of the systems themselves, an approach which approximates a basic service-oriented architecture to revolutionize criminal justice integration. The approach can accomplish in a short time what would take a generation of traditional programming. AOC continues traversing an ESB strategic roadmap that winds through standards, policies, processes, and procedures to foster data exchange among justice partners and to direct future access to Arizona justice data.

For more than 5 years, the Supreme Court has been broadcasting oral arguments from the courtroom around the world in real time. No special software is required to view the live audio/video footage from the Court's website and archived proceedings remain available long after the court date.

The Judicial Branch also recognizes that the public will be better served by improving operational effectiveness with outside non-judicial entities. Technology can enable this objective. For example, with the implementation of expedited family court processes,

the expanded use of electronic data exchange will support speedier and more accurate processing of these cases by facilitating communication among the various state, local, and judicial entities involved.

STRATEGIC ALIGNMENT



BUSINESS VALUE

- Improved effectiveness of the criminal justice system through the electronic exchange of court data and documents and the provision of decision-making information to criminal justice administrators.
- Improved consistency in record keeping and case management practices statewide.
- Improved customer service by providing higher quality of data and case management and greater public access to case-related information.
- Improved protection for domestic violence victims even in other states though automation of protective orders with Project Passport.
- Improved public safety through improved centralized access to information, such as criminal history, orders of protection, domestic violence records, etc., for law enforcement.
- Improved quality and quantity of data available to the AOC for analysis and research.
- Improved electronic integration with the legal community and other justice-related departments and agencies.

- Improved quality of service to the public by providing other government agencies, such as DES and DOR, with more accessible electronic information to improve and support their processes.
- Increased overall accuracy and timeliness, reduction of processing backlogs and database completeness.
- Increased transparency and public access to the Supreme Court's rulemaking process and oral arguments.

DEPENDENCIES

- The Enterprise Service Bus for the Arizona Disposition Reporting System (ADRS) and other data exchange applications.
- Continued development and support of a technical architecture enabling statewide data integration.
- Acquisition of resources to continue developing pilot data sharing projects designed to make use of the integration infrastructure architecture.
- Upgrade / replacement of the judicial data warehouse, JUSTIS.
- Cooperation of state and local agencies, especially law enforcement.
- With state and local agencies, development of mutually agreed-upon security policies and procedures.
- Coordinated change management to assure that interdependent infrastructures continue to function together.
- Replacement of "ink and roll" fingerprinting with LiveScan throughout the state.
- Installation of videoconference equipment in courtrooms of rural superior courts.
- Sufficient network bandwidth to carry increased video and data integration traffic.
- Continued capabilities of the Supreme Court's video streaming outsource partner and network to carry live video.

IMPACTS

With the Judiciary focusing on "front office" functionality, public and agency access becomes a primary concern for every project. Development projects will need to incorporate information and functionality to address this initiative. For instance, in the domestic violence repository, it required that AZTEC add certain information not collected at the time in order to fulfill the electronic reporting requirements as well as provide sufficient information to law enforcement. Videoconferencing initiatives will need to focus on improving access to courts, in most cases by providing for hearings and arraignments and other court processes without the need to be physically present in the courtroom. Even infrastructure maintenance, which is generally perceived to be

initiative as more	data/video travers	es the network o	formation distributer time.	



BACKGROUND

Courts are following industry's lead to "digitize everything," placing a focus on Information Systems to make it easier for people to get their jobs done and done well. As caseloads grow, so does related data entry, and, unfortunately, the harsh reality is that clerical positions are not added at a rate anywhere near the caseload growth rate. The solution is to increase the productivity of existing workers through technology, taking a holistic approach to arrive at a standards-based, integrated system comprised of various disparate parts. This path can invite creative destruction, however, wherein the old way of doing something declines then disappears, resources are re-deployed, institutions and people adapt, the new way grows, and overall benefits are recognized. The problem with creative destruction is its pain for anyone involved in the old technologies and old ways of doing things. Though courts will take an evolutionary rather than revolutionary approach, in the midst of digitization lie some changes in the way courts conduct business, both from the bench and in the back office.

Fundamental to increasing productivity is a mindset that views the court system as an information supply chain -- a network of courts at all levels collectively responsible for dispensing justice within the state. Its goal is to deliver the right information to the right place at the right time. Because data created at or for lower courts may eventually end up at the Supreme Court on appeal, a chain relationship exists between law enforcement, municipal or justice courts, the superior courts, the courts of appeal, and the Supreme Court. This supply chain considers all the individual links leading up to the final one as essential functions within the overall value equation.

As mentioned in "Second-Generation Automation Systems," legacy case management systems necessitate keying and re-keying case information. Second-generation systems will pick up information directly from law enforcement and attorneys' systems, reducing workload by moving the responsibility for input to the source, removing the clerk from the tedious data entry and validation business. The new CMS forms the foundation of the "Digitize Everything" approach, on which are layered imaging, EDMS,

backup/data recovery, court-to-court case transfer, electronic access to records, electronic case filing, central repositories of electronic documents, electronic notifications, electronic archiving, and judge/bench automation activities. In the interim, AZTEC has been enhanced somewhat to enable images to be associated with cases and to accept certain electronic case input from outside sources.

All courts face paper records management and case file storage challenges today. The Judiciary continues to implement technologies such as imaging and electronic filing to address document management requirements. Electronic filing also supports the court's migration to more streamlined processes and workflow management, which imaging was originally begun to support. This initiative has been a high priority each year since the first IT strategic planning session in 1990, as courts have scanned paper filings they receive as a prerequisite to getting rid of paper altogether. But pure imaging provides no metadata, making storage easy but retrieval very difficult. Electronic document management system projects continue to be among the strategic projects in the Commission on Technology's priorities. These projects take the vital next step beyond imaging by enabling key-wording and metadata for efficiently storing and retrieving true electronic documents. All superior court clerks have now implemented a full-featured EDMS and the largest limited jurisdiction courts are following suit.

A June 2000 EDMS study recommended centralized document repositories for jurisdictions lacking technical resources, but legislation requiring the storage of superior court records in the county seat blocked the approach. EDMS centralization was instead directed at selecting a standard application for superior courts to reduce the number of system interfaces that must be built and maintained. Today, many limited jurisdiction courts still lack the technical resources required to operate a robust EDMS over the long term, safeguarding all original electronic records for significant retention periods, and providing timely disaster recovery. A review of business continuity requirements as courts depend increasingly on paperless e-records led to revisiting the approach. Almost 20 smaller courts have plans to implement EDMS in the near term. To speed adoption, the AOC has created a disconnected scanning option that enables LJ courts to connect to a central, shared EDMS rather than each purchasing and maintaining independent local systems.

As electronic records exist within lower courts they can be re-used for appeals in higher courts. Specifications for data and document transfer are being defined to seamlessly move case information and related documents from limited jurisdiction to general jurisdiction courts and then on to appellate courts within the state – the supply chain of justice. Use of a central document repository will alternatively provide judicial officers a point of access to relevant case documents without requiring additional steps to transfer data and the overhead of re-saving them on the receiving court's EDMS.

Public information from the set of digital case information will be collected in a central repository as the intended source for public inquiry. Public users will be able to "subscribe" to selected cases and receive updates based on changes to specific case information. Pro per se filers will increasingly use interactive, intelligent forms that

output a stream of digital data. An e-filing portal, AZTurboCourt.gov, will provide standard court forms online and lead users through the process of filling out forms and printing them or eventually e-filing them. PCs deployed at many court, county, and municipal sites across Arizona make public access to electronic resources increasingly available to court users.

The vast majority of case-related documents begin life on a computer, either in law firms, at parties' homes, or on court websites. Once EDMS file rooms exist and second-generation CMSs are online, electronic case filing will enable courts to use this digital source data directly. The courts' enterprise service bus provides a logical location for storing and forwarding electronic filings through a single "front door" to the court system. Law enforcement will continue to expand use of handheld citation devices, photo radar and red light cameras which output validated digital data. Mass filings, like metropolitan eviction actions originating within the same law office, are also slated for e-filing. Once these projects are implemented, the tipping point will be reached – digital data will be the norm while paper becomes the exception. No plan exists to totally discontinue paper filing at the court counter, though the practice should become practically obscure over time as the convenience of electronic filing increases.

Solving the electronic identity riddle as part of e-filing will allow courts to provide trustworthy case-related notifications of warrants, orders, or judgments, further reducing the production of paper within the court but also increasing reliance on electronic systems and processes. Procedural solutions within the Judiciary, like "/s/ typed name," may relegate need for a complex technical signature solution to only those items originating or transmitted outside the courts. AOC is investigating a product for "signing" documents originating in courts for use by others in a manner that could be checked for validity against a log maintained by the issuing court.

Finally, an electronic archiving strategy will be addressed for records that were only ever digital ("born digital"). State Library Archives and Public Records (SLAPR) is the eventual owner of the records under the retention schedules and must be a partner in crafting the statewide solution that takes into account the end-state of electronic court records. Currently, SLAPR requires records to be transmitted on paper or microfilm, regardless of their storage medium at the court, though ratification of the PDF/A format as an international standard may enable a change to electronic archiving over time.

STRATEGIC ALIGNMENT

STRATEGIC INITIATIVE 7: DIGITIZE THE ENVIRONMENT ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS

- Provide a stable, reliable, functionally rich, extensible, interoperable base of business automation and infrastructure.
- Improve information access and communication from and to the judicial functions.
- Investigate and invest in technology solutions that improve judicial efficiency and effectiveness in handling growing caseloads.

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X

BUSINESS VALUE

IMAGING/EDMS

- Reduce cost of records storage.
- Provide simultaneous access to the same document.
- Lay foundation for electronic case filing.

BACKUP/DATA RECOVERY

- Reduce the risk of losing court assets.
- Reduce time to restore business information following a disaster.

COURT-TO-COURT CASE TRANSFER

- Eliminate re-keying of case information.
- Improve electronic integration with the legal community and other justice-related departments and agencies.

ELECTRONIC ACCESS TO RECORDS

- Improve access by the public to court records.
- Improve access by justice partners to court records.

ELECTRONIC CASE FILING

- Extend filing hours and increase access to justice.
- Reduce paper costs.

ELECTRONIC NOTIFICATIONS

- Simplify court communications processes.
- Reduce paper costs.

ELECTRONIC ARCHIVING

• Improve the accessibility of archived court information following approved retention schedules, especially at the superior court.

DEPENDENCIES

- Transferring increasing numbers of imaged and electronic documents may require upgraded network capability.
- ACAP desktop PCs need to be able to function as scan stations in limited jurisdiction courts for the central EDMS model to work.
- Funding.
- Software development will be required to provide access to electronic documents through and integration with developing case management systems.
- Authorization, verification, and signature technologies and policies must be established.
- Systemic thinking needs to be applied to this entire process, as business process reengineering and standardization are absolute requirements when creative destruction is involved.
- Public, commercial, and government agency needs for court documents online must be balanced against privacy interests.
- Archiving requires periodic media and format updates to ensure continued accessibility of permanent retention files.
- Detailed technical requirements and safe business practices must be clearly defined and adhered to before paper is removed from the court environment.

IMPACTS

Simply put, digitizing the courts provides the foundation for e-government. It enables "born digital" content from litigants' systems to be filed into court (getting clerks out of the labor intensive scanning business) and judgments/minute entries to be rapidly communicated from court to affected parties (getting clerks out of the labor intensive minute distribution business).

It also makes a tremendous dent in the courts' paper records storage challenges since disk space is far cheaper than shelf space and has a far smaller footprint. It enables increased justice partner and public access to information (within the bounds of privacy) since multiple individuals can view the same electronic case file at the same time. And, through metadata, it provides for almost instant location of the needed portion of a particular record without reading page after page of a paper file.

Behind the counter, digitization streamlines caseflow by enabling an electronic workflow in which records are intelligently routed to the next functional area and workers see a queue of records that await their action. This keeps the focus on value-added work, allowing more cases to be processed with the same resource level.

But all this doesn't come without the stress of a paradigm change -- the current workforce is paper-centric and current work processes were all developed in a paper world. Processes and related court policies have to be reconstructed around working "digitally" over time. As industry has proven over the past decade, the rewards of digitization far outweigh the risks.

Specific projects include:

- Electronic Document Management
- Disconnected Scanning
- Public Minute Entry Access
- Business Continuity
- Electronic Filing
- Judge/Bench Automation



Background

In addition to supporting statewide technology projects, the Information Technology Division of the Administrative Office of the Courts is responsible for providing support and development of a variety of automated systems for AOC divisions. These divisions are supporting courts in the pursuit of the goals outlined in *Justice 20/20: A Vision for the Future of the Arizona Judicial Branch 2010-2015*.

The Administrative Office of the Courts' mission is to assist the Chief Justice in carrying out the constitutionally prescribed responsibility for providing administrative supervision over the integrated Arizona court system and support the Chief Justice and the Supreme Court in providing quality administrative leadership and assistance to Arizona's courts.

Further, legislation has often charged the Supreme Court with administering certain programs in support of justice-related activities, for instance, Foster Care Review Board (FCRB) functions, certification of private fiduciaries and process servers, the confidential intermediary program, defensive driving school certification, legal document preparer certification, certified reporter certification, and grant tracking. These activities often require automation in order to perform the data collection and tracking needed. Several programs of this nature are supported and/or in development.

Strategic Alignment

Business Value

Defensive Driving

Completed development and testing efforts to replace the legacy Defensive Driving Tracking System. The new system will allow for enhanced data collection and reporting to the courts. The additional fields that have been added to the defensive driving interface will allow enhancements to be made to the court's case management systems to automate the processing of diversion fees remitted to the courts by the schools at the case level.

Certification and Licensing Department (CLD) Online Project

 Modified the online renewal certification applications in compliance with legislative and ACJA changes.

Attorney Admissions Online Project

 Implemented new vendor software to allow Attorney Admission Examination and Character and Fitness applications to be submitted online and improve the automation to process the applications and provide applicants real-time updates via the web. This significantly reduces the call volume that must be handled by the Certification and Licensing Attorney Admissions area.

Finance Projects

(The Administrative Office of the Courts maintains budget, accounting, and personnel records for the AOC and the Supreme Court.)

• None this year.

Project Management Office

 Coordinated interviewing and technical testing of candidates for positions in the Information Technology Division.

- Continued project 'circle' forums for on-going project management and team resource training.
- Assisted additional project managers in obtaining state project management certification.
- Initiated monthly, all-day planning meeting to better coordinate project resources.
- Assisted project managers on various individual projects.
- Provided regular oversight and project status reporting for executive management. Gave direction to project managers, coached and provided project assistance, as needed.
- Provided additional oversight and processes for high profile, enterprise projects.